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BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Application of)
)
HAWAII ELECTRIC LIGHT COMPANY, INC.)
)
For Approval of a Power Purchase)
Agreement for Renewable Dispatchable Firm)
Energy and Capacity.)

DOCKET NO. 2017-0122

DIVISION OF CONSUMER ADVOCACY'S
POST-HEARING BRIEF

AND

CERTIFICATE OF SERVICE

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Pursuant to the Hawaii Public Utilities Commission's ("Commission") Prehearing Conference Order No. 38188, issued on January 19, 2022,¹ Order No. 38215 Lifting Docket Suspension and Modifying the Procedural Schedule, issued on February 7, 2022 ("Order No. 38215"), and Amended Notice of Evidentiary Hearing, filed on February 7, 2022 ("Amended Notice"), the Division of Consumer Advocacy ("Consumer Advocate") hereby submits its Post-Hearing Brief.

There are still important questions and concerns about the Hawaii Electric Light Company, Inc.'s ("Company", "Applicant", or "Hawaii Electric Light") proposed Amended and Restated Power Purchase Agreement for Renewable Dispatchable Firm Energy and

¹ Prehearing Conference Order No. 38188, at 11, cites previous Commission orders to reiterate that Post-Hearing Briefs would be due three weeks after the notice of hearing transcript. The Commission filed its Notice of Hearing Recording on March 8, 2022.

Capacity between Hawaii Electric Light and Hu Honua (“A&R PPA”) and the request for preferential rates that the Applicants have not adequately addressed. In the absence of the burden of proof being met, the Consumer Advocate believes that the Commission cannot find that the proposed A&R PPA is in the public interest based on the current record. Thus, if the Commission is inclined to approve the A&R PPA, the Commission should adopt the Consumer Advocate’s recommended conditions to address the remaining questions and concerns related to the A&R PPA, including the remaining questions related to Greenhouse Gas (“GHG”) emissions and preferential rates. Without adopting those conditions, the Consumer Advocate contends that it is unclear whether sufficient benefits outweigh the potential total costs, which includes the rate, GHG, and environmental impacts that will result from the proposed Hu Honua facility.

I. BACKGROUND.

On May 9, 2017, Hawaii Electric Light filed a letter in Docket No. 2012-0212 (“Letter Request”) requesting approval of the A&R PPA , and forwarding Hu Honua’s request for preferential rate for the purchase of renewable energy produced in conjunction with agricultural activities pursuant to HRS § 269-27.3. On May 17, 2017, the Commission opened this proceeding by issuing Order No. 34554 Opening a Docket to Review and Adjudicate Hawaii Electric Light, Inc.’s Letter Request for Approval of Amended and Restated Power Purchase Agreement, Filed in Docket No. 2012-0212 on May 9, 2017.²

² In Docket No. 2012-0212, the Commission transferred the Letter Request by Order No. 34554 Transferred Request for Approval of Amended and Restated Power Purchase Agreement from Docket No. 2012-0212 to Docket No. 2017-0122.

For a detailed background of this docket up until about December 2021, please see the Division of Consumer Advocacy's Statement of Position, filed on December 21, 2021 ("Prehearing SOP"), at 1-6. Since the initiation of this docket, these extensive proceedings have already been appealed three times to the Hawaii Supreme Court ("Court") by two different parties, variously. Most recently, after the third appeal to the Court was dismissed, the Commission held an evidentiary hearing on March 1-4 and 7, 2022.

II. DISCUSSION.

A. The Commission Properly Applied the HELCO I and II Opinions to Formulate the Statement of Issues in this Phase of the Proceedings.

1. The HELCO I and II Opinions.

In its opinion in In re Hawaii Electric Light Company, Inc., 487 P.3d 708 (2021) ("HELCO II"), the Court clearly stated that "the [Commission]'s 2017 approval of the Amended [and Restated] PPA remains vacated" and remanded these proceedings back to the Commission with instructions "to follow the instructions . . . provided in HELCO I".³ In In re Hawaii Electric Light Company, Inc., 445 P.3d 673 (2019) ("HELCO I"), the Court instructed the Commission to "give explicit consideration to the reduction of GHG emissions in determining *whether to approve* the Amended PPA".⁴ (emphasis added)

Although the Court in HELCO II, reviewing the Commission's Decision and Order No. 34726, issued on July 28, 2017 ("Decision and Order No. 34726"), made a distinction

³ HELCO II, 487 P.3d at 711.

⁴ HELCO I, 445 P.3d at 697.

between the 2017 waiver from the Framework for Competitive Bidding, on the one hand, and the Commission's approval of the Amended and Restated Power Purchase Agreement and related approvals, on the other hand, the Court did not in any way limit the Commission's scope of review of the A&R PPA.

Rather, in vacating the approval of the A&R PPA set forth in Decision and Order No. 34726, the Court merely expanded the Commission's scope of review on remand to include GHG emissions and long-term environmental consequences.⁵ The Commission is charged with determining whether to approve the A&R PPA by way of "express consideration of GHG emissions that would result from approving the Amended PPA, whether the cost of energy under the Amended PPA is reasonable in light of the potential for GHG emissions, and whether the terms of the Amended PPA are prudent and in the public interest, in light of its potential hidden and long-term consequences."⁶

2. The Commission's Statement of Issues.

As most recently reiterated in the Amended Notice, at 2, the Statement of Issues for this remanded phase are as follows:

1. What are the long-term environmental and public health costs of reliance on energy produced at the proposed facility?

a. What is the potential for increased air pollution due to the lifecycle GHG emissions of the Project?

2. What are the GHG emissions that would result from approving the Amended PPA?

3. Whether the total costs under the Amended PPA, including but not limited to the energy and capacity costs are reasonable in light of the potential for

⁵ HELCO II, 487 P.3d at 711.

⁶ HELCO I, at 698.

GHG emissions.

4. Whether the terms of the Amended PPA are prudent and in the public interest, in light of the Amended PPA's hidden and long-term consequences.

The Commission's Statement of Issues largely tracks the Court's language of its instructions in HELCO I, at 698, for this remand phase. Where the Commission has added additional specificity, such as in Issue Nos. 1 and 1.a, and its clarifications to Issue Nos. 1.a and 3, the Commission has followed the Court's general instructions in HELCO II, at 710, that "the opinion, as a whole, [should be] read in conjunction with the judgment and interpreted in light of the case's procedural history and context". The Court has been emphatic in recent years about the Commission's duty to consider more information about GHG emissions and related and long-term environmental effects of proposed projects,⁷ and the Commission's Issue Nos. 1 and 1.a are targeted to bring up for consideration exactly such hidden and long-term environmental issues related to GHG emissions from the facility.

Also, the Commission has not, here in this Statement of Issues, read HELCO I similar to how it did before the last remand and gotten stuck on "a solitary word or decontextualized phrase";⁸ rather, its clarification that Issue No. 3 should consider total costs, including the proposed capacity costs, fulfills the spirit of the Court's instructions to consider cost of the project in light of GHG emissions. Otherwise, given that the approval

⁷ See also In re The Gas Company, LLC, 465 P. 3d 633 (2020) ("In re TGC"), instructing the Commission to conduct a lifecycle analysis of GHG emissions in order to fulfill that part of HRS § 269-6(b).

And further, the Court expressed in In re TGC how it views the GHG emissions consideration in HRS § 269-6(b): expansive – a lifecycle analysis not necessarily bound in terms of information and data by just the Commission's jurisdiction to directly regulate. See e.g., In re TGC, at 648, n.10.

⁸ HELCO II, 487 P.3d at 710.

from Decision and Order No. 34726 was vacated, if the Commission were to consider only GHG and energy costs in this most recent phase of this proceeding, the result would be empty formalism in practice and myopic in result. Instead, in order to find that the proposed A&R PPA is in the public interest, the Commission must consider all costs, which include will include the energy, capacity, other operational and maintenance costs, and other costs that will impact customer bills and will also include the GHG, environment, and health costs. Thus, the Commission's Statement of Issues is consistent with the Court's guidance and focusing only on GHG costs, as has been suggested, would not result in a reasonable outcome for customers and would likely make any resulting Commission decision and order vulnerable to yet another appeal.

3. Act 82 and HRS § 269-6.

The State Legislature amended HRS § 269-6, via Act 82 (2021), to limit the types of dockets in which the Commission needs to consider GHG emissions and related fossil fuel issues. Hu Honua has argued in several motions and other filings that these amendments somehow should limit the scope of the Commission's considerations now,⁹ but Hu Honua's arguments are unconvincing. The Commission has already meticulously rebutted and rejected Hu Honua's contortions of Act 82's legislative history.¹⁰ Therefore, the Consumer Advocate offers that a plain reading of the amended provisions, as well, does not line up with Hu Honua's proposed interpretation. Amendments to HRS

⁹ See generally Hu Honua's Motion for the Commission to Consider Act 82 and Address Its Impact on Order No. 37852 Reopening Docket filed July 20, 2021; Hu Honua's Motion to Confirm that Hawaii Revised Statutes Section 269-6(b), as Amended by Act 82 Applies to this Proceeding.

¹⁰ Decision and Order No. 37910, at 23-32.

§ 269-6(b) limited the mandatory consideration to “electric and gas utility[ies]” and gave the Commission discretion about including the consideration to “water, wastewater, or telecommunications providers on an individual basis”. Amendments to create and add a new HRS § 269-6(c) focused on the types of approvals sought; whereas the preexisting trigger under HRS § 269-6(b) was any applications for approval of the “reasonableness of the costs pertaining to . . . utility system capital improvements and operations”, the new HRS § 269-6(c) calls out exceptions for applications for “a utility’s routine system replacements, such as overhauls and overhead or underground line determinations, or determinations that do not pertain to capital improvements or operations, including but not limited to financing requests.” Neither the amendments to limit the types of utilities nor those to limit the types of applications limit the scope of the fossil fuel-related issues the Commission is to consider. Thus, the scope was not limited by Act 82 since the Court last interpreted HRS § 269-6 in HELCO I and II.

B. There are Remaining Questions about the Applicants’ Evidence Regarding Greenhouse Gas Emissions and Other Environmental Effects.

As stated in the Consumer Advocate’s Prehearing SOP and during the evidentiary hearing, the Consumer Advocate has remaining concerns and questions regarding the assumptions underlying the GHG analysis performed by Hu Honua’s consultant, Environmental Resources Management (“ERM”) and the estimated figures in the Carbon Calculator in Table 2 (simulated scenario) and Table 3 (full 21.5 MW committed capacity scenario) that do not appear to be supported by available project-specific data at this

time.¹¹ These concerns are tied primarily to: 1) upstream GHG emissions from the cultivation, harvesting, and transportation; and, 2) sequestered GHG emissions from the regrowth of the biomass feedstock; and stem from information provided by Hu Honua that is designated restricted, which could not be discussed at the evidentiary hearing without going *in camera*. However, the Consumer Advocate also notes that the GHG analyses do not reflect possible effects from possible third-party sales, such as the venture to use excess energy to produce hydrogen fuel that was first raised by Hu Honua Witness Warren Lee in his direct testimony. Therefore, the Consumer Advocate provides below additional details on what it sees as persistent questions and concerns.

First, as it pertains to upstream GHG emissions from the cultivation, harvesting, and transportation, the Consumer Advocate has maintained that the estimated GHG emissions associated with the first seven (7) to nine (9) years of the Project appear to be reasonably supported and documented through leases and/or harvest agreements currently Hu Honua and CN Renewable Resources, LLC (“CN Renewable Resources” or “CNRR”) hold with the Pahala, Hamakua, and Parker plantations. However, ERM’s updated and additional analyses assume that the biomass feedstock will be cultivated and harvested on Hawaii Island. Due to the fact that the Fuel Sales and Purchase

¹¹ On pages 10-12 of Order No. 36382, the Commission provided general guidance on how to conduct the GHG emissions analyses for the Project, as well as stating “the Applicants should document all assumptions” in developing the GHG emissions impacts related to the operation of the Project and “provide as much project-specific data as possible” (Order No. 36382, at 11-12). The Consumer Advocate notes that the Commission did not provide any further updates and/or guidance pertaining to the methodology and data Hu Honua should rely upon to estimate the Net Operational and Net Lifecycle GHG Emissions Impacts of the Project in the current remand.

Hu Honua has suggested that future, actual measurements of GHG sequestration – when available at such a later date, if and after the project is approved by the Commission – will be a preferable method. However, promises to use actual and recorded project measurements in the future do not make the evidence in front of the Commission now, upon which the Commission must make its determinations, any more accurate.

Agreement with CN Renewable Resources does not contain any contractual reference to the Pahala, Parker, and Hamakua plantations, or any other biomass plantation, that would indicate the source or type of the feedstock, whether on Hawaii Island, in the State of Hawaii, or on the continental US, the Consumer Advocate maintains that without a condition or similar term in the Fuel Sales and Purchase Agreement with fuel supplier CN Renewable Resources that stipulates the biomass feedstock will be sourced from only plantations on Hawaii Island or within the State of Hawaii, the Consumer Advocate is unable to determine if other out-of-state sources of biomass feedstock may need to be included in Hu Honua's GHG emissions model once the feedstock already secured by Hu Honua is exhausted. Without this condition or similar term, Consumer Advocate is unable to determine if the potential upstream GHG emissions related to potential transportation of the imported feedstock and its cultivation may be understated and are reasonably accounted for in the Updated and Additional ERM GHG Analyses.

Second, related to the modeling of GHG emission sequestration, in response to LOL-IR-2021-3, Hu Honua provided an updated report from Forest Solutions, LLC ("Forest Solutions") entitled the 2020 Biomass Fuel Supply Report Update for CN Renewable Resources ("2020 Updated Forest Solutions Report"), which provided maps of the locations contained in the leases and/or harvest agreements Hu Honua and CN Renewable Resources, LLC ("CN Renewable Resources" or "CNRR") with the Pahala

([REDACTED])

[REDACTED]), Hamakua ([REDACTED])

[REDACTED]), and Parker ([REDACTED])

[REDACTED]) plantations.¹² The 2020 Updated Forest Solutions Report provides analyses for these three plantations currently contracted to supply Hu Honua with biomass feedstock based on the status of the current leases. [REDACTED]

[REDACTED] The 2020 Updated Forest Solutions Report, at 6, details several assumptions that informed the analyses therein; one of which is that "[REDACTED]"

[REDACTED]"¹³ (emphasis added) The Consumer Advocate is concerned about Hu Honua's ability to secure feedstock sources and about assumptions for GHG sequestration at existing plantations.

Based on the above, the Consumer Advocate requested information on if Hu Honua has renegotiated, or is currently engaging with the landowners to renegotiate, the terms of the leases and/or agreements, along with the dates of any formal or informal meetings or conversations with landowners. In response to CA/Hu Honua-IR-135.a and b, Hu Honua stated that it "would be in a better place to negotiate once the A&R PPA is approved," and, once approved, believes landowners will be amenable to extending the leases and/or agreements for the biomass feedstock in order to replant "for at least an additional growth and harvest cycle, although two cycles would be preferred." The Consumer Advocate still seeks to understand why landowners would not be amenable to signing a conditional agreement, where the agreement would be conditioned on the approval of the A&R PPA.

¹² 2020 Updated Forest Solutions Report, at 10, Table 3.

¹³ See also Figure 8, 2020 Updated Forest Solutions Report, at 23, and Figure 11, at 28.

In reviewing the Carbon Calculator's estimated figures in Table 2 (simulated scenario) and Table 3 (full 21.5 MW committed capacity scenario) in both the Updated and Additional ERM GHG Analyses, the Consumer Advocate notes that plots designated for replanting are not identified, leaving a general estimation of how much biomass would need to be regrown annually to meet the Hu Honua's commitment to be 30,000 MT carbon negative. Furthermore, in response to CA/Hu Honua-IR-95.a, Hu Honua stated that it "does not plan to plant/regrow plots at the Pahala and Hamakua plantations due to the expiration of the applicable lease and license agreement" and, in response to CA/Hu Honua-IR-95.a.1, that:

Hu Honua understands that the intent of the license agreement for the Hamakua plantation is **to clear the land** of biomass for other use by the Lessor. With respect to the Pahala plantation, the Lessor has indicated to Hu Honua that the lease will not be extended because the Lessor plans to **change the nature of the land's use**. (emphases added)

Based on the above, the Consumer Advocate does not believe the current modeling reasonably reflects the information provided in the record to date, as it pertains to the both the GHG emissions and sequestration. Additionally, it is not clear at this time if Hu Honua will be able to coppice and replant biomass on currently held leases as stipulated as first and second priority orders, detailed in Hu Honua-201, Hu Honua Carbon Emissions Reduction Commitment and Plan. Thus, without more project and site-specific information, notwithstanding assertions that the placeholders used in the Carbon Calculator should be adequate and sufficient, the Consumer Advocate believes that the Commission's ability to confirm such assertions is impaired.

Because there is no condition or similar term in the Fuel Sales and Purchase Agreement with fuel supplier CN Renewable Resources that stipulates the biomass

feedstock will be sourced from plantations on Hawaii Island, or even within the State of Hawaii, the Consumer Advocate contends that the Commission will be unable to determine if upstream emission related to off-island harvesting and transportation from these sources of biomass feedstock do not need to be included in Hu Honua's GHG emissions model once the seven (7) years of feedstock already secured by Hu Honua is exhausted.

Also, Hu Honua needs to clarify comments by Witness Warren Lee at the evidentiary hearing¹⁴ about the possibility of taking in Hawaii Island County green waste as a feedstock source, and about access to invasive species biomass on lands administered by the State Department of Land and Natural Resources. Hu Honua Witness Braulio Pikman later confirmed that Hu Honua has not yet done any analysis about how much biomass from these two possible sources the facility can take.¹⁵ While offered as a potential benefit to the project, the absence of additional information of the possible volume and types of biomass of this feedstock, the Commission's ability to confirm whether this will result in a net reduction or addition of GHG emissions is impaired.

Finally, there are still several important outstanding questions about Hu Honua's Carbon Commitment. It still lacks sufficient detail on how to monitor, verify and seek enforcement if there are any shortcomings.¹⁶ Also, the Consumer Advocate still has broader questions about the concept of carbon offsets in any case as they should affect

¹⁴ Warren Lee, Recording of Hearing, Hearing Day 2, March 2, 2022, at 7:03:15 – 7:04:29.

¹⁵ Braulio Pikman, Recording of Hearing, Hearing Day 3, March 3, 2022, at 0:56:37 – 1:00:54.

¹⁶ If the Commission ever wants to investigate whether carbon capture is in the public interest, it should do so purposefully, finding the most economical way, not just project-by-project as they come up.

carbon projections and even renewable portfolio calculations; possible future offsets could just as easily be applied to a fossil fuel facility, and it is not clear whether that comports or not with the intent of the Legislature.

Per Issue Nos 1, 1.a, and 2, the Consumer Advocate offers that there are remaining questions about the GHG emissions that would result from approving the A&R PPA, and more questions than answers about air pollution due to lifecycle GHG emissions and related long-term environmental and public health costs of reliance on energy produced at Hu Honua.

C. There are Still Remaining Concerns Regarding the A&R PPA Because the Applicants have Not Yet Carried Their Burden of Proving that the Agreement is in the Public Interest.

1. Production Cost Simulation Results and Grid Planning.

Hawaii Electric Light has no specific need for the Hu Honua facility right now. During cross-examination, Hawaii Electric Light Witnesses Robert Uyuenten and Lisa Danglemaier testified that Hawaii Electric Light does not need the Hu Honua facility for capacity or reliability criteria right now.¹⁷ Thus, absent such need, in both the Consumer Advocate's and Hawaii Electric Light's production simulation modeling, Hu Honua's probable dispatch on the grid tends towards minimal levels of operations consistent with economic dispatch guidelines.¹⁸

¹⁷ Robert Uyuenten, Recording of Hearing, Hearing Day 1, March 1, 2022, at 5:02:03-5:02:24; Lisa Danglemaier, Recording of Hearing Day 2, March 2, 2022, at 2:48:04-2:48:58.

¹⁸ Responses to CA/HELCO-IRs 62.b.2 and 62.c. See also response to CA/HELCO-IR-31.b.

Hu Honua has suggested at the evidentiary hearing that if fuel prices were higher that Hu Honua would be a relatively lower cost generation source, and so would be dispatched at a higher generating output.¹⁹ It asked cross-examination questions about the price of fuel used in the production simulation analyses for the Keahole and Hamakua Energy Partners (“HEP”) generating plants.²⁰

First, instead of resolving questions, Hu Honua is raising more questions about modeling assumptions – such as recent oil price shocks. While not explicitly stated in the hearing, if there will be a request for the Commission to consider certain updates to modeling inputs, the Consumer Advocate recommends rejecting such notions. While the Consumer Advocate supports the reasonableness of using the most current information available, the Commission should avoid allowing a moving target in terms of when to close the record and avoid the situation where parties may not have a reasonable opportunity, including relying on the discovery process, to evaluate, verify, and incorporate (or reject) more recent information.²¹ Otherwise, if the Commission may be asked to consider updated fuel prices, the Commission may need to ask the applicant to update all applicable inputs and assumptions – to avoid cherry picking – and the

¹⁹ See Robert Uyuenten, Recording of Hearing, Hearing Day 1, March 1, 2022, at 5:20:00 – Hearing Day 2, March 2, 2022, at 0:35:58.

²⁰ See Don Gruenemeyer, Recording of Hearing, Hearing Day 4, March 4, 2022, at 0:24:00 – 2:07:00.

²¹ Cf. Order No. 34720 Denying Hawaiian Electric Company, Inc.’s Motion for Partial Reconsideration of Order No. 34664, Docket No. 2016-0328, at 9-16 (filed on July 20, 2017) (suggesting that the Commission has general authority to regulate and manage the conduct of proceedings before the Commission and can oversee the presentation of evidence to facilitate the orderly disposition of a docket); see also Order No. 33839 Granting in Part, and Deny in Part, the Consumer Advocate’s Motion to Preclude Testimony and Evidence, Docket No. 2016-0014 (filed on July 29, 2016) (for a similar proposition and discussion.).

proceeding would need to be extended again and establish a cycle to possibly extending the proceeding again if fuel prices or any other model input may increase or decrease.

Second, as confirmed by Hu Honua Witness Dr. Bruce Plasch,²² a scenario with prolonged significantly higher oil prices, if that affected Hu Honua's dispatch level, could only make Hu Honua *relatively* less expensive, but would still raise total bills for Hawaii Island ratepayers.

Third, however, is that even though current fuel prices may be higher than when the production simulation modeling occurred, with Hawaii Electric Light's glide path to meeting the Renewable Portfolio Standards ("RPS") within the proposed thirty-year term of the A&R PPA, oil use will decrease significantly in later years across Hawaii Electric Light's generation fleet, and so oil's price will have less and less effect. At some point in the future, as all fossil fuels are replaced with renewable energy, it will be common-place for renewable energy resources to displace other renewable energy resources because everything will be renewable.

Fourth, Hu Honua's proposition about oil prices presumes that Hu Honua may be dispatched instead of Keahole or HEP purely based on relative pricing, but without regard to other factors like relative capacities. The results from Hawaii Electric Light's Resource plan in HELCO-301 without Puako Solar showed that the generating output from Keahole was operating at 20% capacity factor or less on average for the study period with Hu Honua in service. HEP operated at less than a 5% capacity factor while Hu Honua operated at around a 55% capacity factor. The hourly energy results show that these generating plants (Hu Honua, Keahole, and HEP) are all operating near their minimum

²² Dr. Bruce Plasch, Recording of Hearing, Hearing Day 3, March 3, 2022, at 1:32:10-1:42:58.

outputs especially during the sunny part of the day when solar generation is supplying much of the daytime energy and Puna Geothermal Ventures (“PGV”) and wind generation supplies much of the energy during other periods. In many hours, HEP is not supplying energy and is turned off. The model results reflect, in the evening and early morning hours of the day after the sunset, Hu Honua, Keahole, and HEP ramp up to supply energy to supplement what is provided from wind generators and PGV. Keahole and HEP are mainly providing reserves and load regulation while Hu Honua supplies a constant 10 MW (or more) and load following and reserves when needed. Since HEP operates at a very low generation level to provide regulation and reserves, the fuel price is not the main driver of its dispatch (to generate more energy). If the fuel price were to be substantially lower than included in the resource plan, then it might generate more energy if less costly than Keahole, Hu Honua, and PGV. However, for HEP to displace these generators, they would have to be operating at a greater level of output than their minimum outputs, and they are not, because they are usually generating to provide regulation and reserves. The “Without Unapproved Resources Plan”, which was analyzed by Hawaii Electric Light at Hu Honua’s request,²³ decreases the amount of generating units (HEP and a new Geothermal plant) that are available to provide regulation and reserves. The result shows that Hu Honua, Keahole, and PGV generate at higher levels than the resource plan without Puako Solar. However, the result also shows that there is unserved energy. The initially reviewed resource plan without Puako Solar did not have unserved energy.

²³ Hu Honua has also suggested that it may not be appropriate for Hawaii Electric Light to model with as-of-yet unapproved projects and unapproved contract extensions or renegotiations. The Commission should question, however, whether modeling without unapproved projects and unserved loads will result in reliable outputs because modeling Hawaii Electric Light’s system without unapproved projects could lead to shortfalls of capacity and energy, and failure to meet RPS milestones and reliability criteria and understate the costs to serve the forecasted loads.

Unserved energy is an indication that there will not be enough generating resources to serve customer's electric use. Thus, relying on a modeling run that has unserved energy and comparing it to model outputs that do not have unserved energy will likely have skewed comparative results and would have "hidden" costs related to the additional resources required to eliminate the unserved energy.

Also, it should be recognized that Hu Honua is located approximately fifty miles from HEP.²⁴ HEP is located in the northern part of the island and is also distant from Keahole. Thus, there are reasonable concerns regarding Hu Honua's ability to replace the voltage and regulation support from fifty miles away in the same manner that it is currently supplied by HEP and it cannot be simply assumed that a unit's capacity and energy can be replaced by another unit without consideration of power flow, stability, and other studies and unaccounted for costs to ensure the same levels of reliability and service quality if HEP were not in service.²⁵

Thus, even though Hu Honua has been offered as a means by which to accelerate the retirement of existing fossil-fueled units,²⁶ the support for this assertion has not been provided. Hu Honua should not be considered a possible one-for-one replacement of either Keahole or HEP for other reasons as well. The Keahole and HEP combined cycle generating plants have more operating flexibility than Hu Honua, and each are roughly

²⁴ Response to CA/HELCO-IR-64.

²⁵ See response to CA/HELCO-IR-72.

²⁶ See, e.g., Hu Honua's Prehearing Testimonies filed on September 16, 2021, Hu Honua Testimony T-1, at 6; see also Hu Honua Bioenergy, LLC's Prehearing Statement of Position, at 36, filed on December 21, 2021.

three times the capacity of Hu Honua.²⁷ The Consumer Advocate's assessment of the results from the production simulation analyses that Hawaii Electric Light prepared indicate that maintaining existing generators as shown in its plan provides more regulation and reserves than if generating resources were removed from service, with Hu Honua in-service. Hu Honua does not appear to be a good candidate to replace other generating units currently in Hawaii Electric Light's fleet. Hawaii Electric Light has three combustion turbines that are 20 MW, 15 MW, and 10 MW, respectively, and several diesel generators that are 2.5 MW and 1.25 MW. All these units generate very little energy and are used for backup and reserves and perhaps for voltage support during certain conditions. These are quick-start units that do not have to continue generating after a particular system event has ended. Such quick start units serve important reliability and resilience roles and it would not make sense to remove these from service unless it can be shown that Hu Honua can serve the same purpose as these generators, which has not yet been done. The remaining generators that Hu Honua could replace would seem to be future theoretical generation that has not yet been installed.

2. Terms of the A&R PPA.

Without a need for Hu Honua on Hawaii Electric Light's grid right now, and in light of the available GHG studies, remaining questions related to several of the A&R PPA terms appear more concerning not less. For instance, the Consumer Advocate has pointed out that the A&R PPA appears to include terms and/or conditions that should be

²⁷ Lisa Danglemaier, Recording of Hearing, Hearing Day 2, March 2, 2022, at 2:32:00-2:48:00.

updated to avoid having the Commission approve a stale or unenforceable agreement.²⁸ Even though invited to do so, the record does not appear to include updates to the A&R PPA.

Furthermore, the A&R PPA's thirty-year term is ostensibly a mechanism to spread out the costs of the Project over a longer time frame and thus reduce the price sought by Hu Honua.²⁹ However, as noted in previous filings, the price is still high, and so a thirty-year term may only serve to lock in that high price for an unreasonably long time.³⁰ Thus, the Consumer Advocate has offered that, given the unquestioned impact of the higher cost associated with Hu Honua, there should be a showing that the benefits associated with approval of the A&R PPA will exceed the costs consistent with the notion of the Commission's guidance that, since Hawaii island is ahead of the RPS requirements, new projects should lower consumers' bills.³¹ This has not yet been demonstrated.

Also, especially with recent examples of renewable energy projects around the state encountering persistent community opposition, the Consumer Advocate is very concerned about community sentiment towards the Hu Honua Project, which includes concerns about environmental and health impacts, and whether Hu Honua is doing enough to seek out and address community concerns.³² While there may have been efforts to reduce the Commission's consideration of community concerns to the numbers

²⁸ See, e.g., CA-ST-1, at 9.

²⁹ See the Consumer Advocate's Statement of Position, at 32

³⁰ Id.

³¹ Prehearing SOP, at 44.

³² Prehearing SOP, at 35.

of letters for or against the project,³³ and further limit the scope to only the number of comments received during the most recent phase,³⁴ the Consumer Advocate urges the Commission to reject the idea that adequate community outreach is limited to ensuring that there are more supportive comments – as compared to opposed – related to a project.³⁵ If such a position is adopted, this would establish a dangerous precedent that would encourage parties to simply run letter and comment generating campaigns instead of requiring utilities and developers to meaningfully engage with the community and customers.

D. The Commission Should Deny Hu Honua's Bona Fide Request for Preferential Rates Because Hu Honua has Failed to Prove that the Requested Rates are Reasonable and in the Public Interest.

Since Hawaii Electric Light has no specific need for the Hu Honua facility right now, the costs to ratepayers for the facility should be reasonable.³⁶ The price for the A&R PPA will result in increases in customers' bills, and, in the absence of other factors, the Commission should only approve a project if it will reduce Hawaii island customers' bills. Thus, it appears that the Commission must consider whether preferential rates should be approved.

On May 5, 2017, Hu Honua provided Hawaii Electric Light with its written request for preferential rates for the purchase of renewable energy produced in conjunction with

³³ Dean Nishina, Recording of Hearing, Hearing Day 3, March 3, 2022, at 4:58:48 to 5:00:18.

³⁴ Dean Nishina, Recording of Hearing, Hearing Day 3, March 3, 2022, at 5:18:02 to 5:19:49.

³⁵ Dean Nishina, Recording of Hearing, Hearing Day 3, March 3, 2022, at 5:20:29 to 5:21:54.

³⁶ Decision and Order No. 31759, at 96, issued on December 23, 2013 in Docket No. 2012-0185.

agricultural activities pursuant to HRS § 269-27.3.^{37,38} On May 9, 2017, Hawaii Electric Light submitted Hu Honua's request for preferential rates as part of its Letter Request, attaching a copy of Hu Honua's bona fide request for preferential rates as Exhibit B. Under cross-examination, Hawaii Electric Light Witness Rebecca Dayhuff-Matsushima confirmed that the HRS § 269-27.3 provisions were utilized because Hawaii Electric Light never agreed to Hu Honua's proposed pricing;³⁹ that is, consistent with the Commission's guidance regarding preferential rates, Hawaii Electric Light let Hu Honua submit a separate bona fide request since Hawaii Electric Light could not reach agreement on a price nor defend the A&R PPA price as reasonable.

1. Preferential Rates under HRS § 269-27.3.

Under HRS § 269-27.3(a), the Legislature empowered the Commission *with discretion* to approve a request for preferential rates. The Commission "*shall have the authority to establish preferential rates for the purchase of renewable energy produced in conjunction with agricultural activities.*" (emphasis added) The Consumer Advocate offers

³⁷ Letter Request, at 5.

³⁸ HRS § 269-27.3 Preferential renewable energy rates; agricultural activities

- (a) It is the policy of the State to promote the long-term viability of agriculture by establishing mechanisms that provide for preferential rates for the purchase of renewable energy produced in conjunction with agricultural activities. The public utilities commission shall have the authority to establish preferential rates for the purchase of renewable energy produced in conjunction with agricultural activities.
- (b) Upon receipt of a bona fide request for preferential rates for the purchase of renewable energy produced in conjunction with agricultural activities, and proof that the renewable energy is produced in conjunction with agricultural activities, a public utility shall forward the request for preferential rates to the public utilities commission for approval.

³⁹ Rebecca Dayhuff Matsushima, Recording of Hearing, Hearing Day 1, March 1, 2022, at 13:50 -14:22.

that since the proposed A&R PPA is not needed for reliability purposes and that there are less expensive renewable generation options to continue Hawaii island's progress towards RPS compliance, the need to grant a request for preferential rates has not been supported. In the alternative, the Commission could, in its discretion under HRS § 269-6(b) and 269-27.3, approve the request for preferential rates if sufficient evidence has been provided to determine that sufficient verifiable benefits will exceed the total costs. If this alternative is to be pursued, however, the Consumer Advocate urges the Commission to ensure that the benefits are verifiable and deliverable since it would not be in the public interest to approve higher rates without the benefits actually being delivered to consumers especially when less expensive renewable generation alternatives may be available.

While the first sentence in HRS § 269-27.3(a) states Hawaii's general policy to "promote the long-term viability of agriculture by establishing mechanisms that provide for preferential rates for the purchase of renewable energy produced in conjunction with agricultural activities", and HRS § 269-27.3(b) outlines a process for forwarding a bona fide request for preferential rates directly to the Commission, the second sentence of HRS § 269-27.3(a), which empowers the Commission with discretion to approve preferential rates, is silent on a standard by which the Commission should rely to decide how to exercise its discretion. The Consumer Advocate respectfully offers that the Commission should look to the "just and reasonable" standard in HRS § 269-27.2(d)(1) and "best interest of the general public" standard in HRS § 269-27.2(d)(5). HRS § 269-27.2(d) is a more comprehensive statutory provision regarding Commission review of "payments made by the public utility to non-fossil fuel producers for firm capacity" and should provide

the Commission persuasive authority for an appropriate standard with which to exercise its discretion regarding preferential rates under HRS § 269-27.3. Per such standards applied from HRS § 269-27.2(d), however, Hu Honua's requested pricing is not "just and reasonable" nor in the "best interest of the general public". The proposed pricing would result in total costs that would substantially raise Hawaii Island ratepayers' bills and, based on the current record, would not result in the benefits exceeding the costs; such an outcome is not just and reasonable nor in the best interest of the public.⁴⁰

Finally, Hu Honua may not even qualify as producing renewable energy "in conjunction with agricultural activities" within the state, and so may not qualify for preferential rates under HRS § 269-27.3, because of uncertainty about an in-state feedstock, in emergencies and from long-term sources.⁴¹ If feedstock for the facility is brought in from outside of the state, it would not be consistent with the intent of § 269-27.3 and would also raise other questions regarding whether imported feedstock – even if it is biomass - should be authorized as it results in greater risks in terms of fuel supply, money leaving the state, and other consequences that renewable energy is supposed to mitigate or eliminate.

2. Cost Impacts.

As noted by the Commission in its Decision and Order No. 31759, filed on December 23, 2013, in Docket No. 2012-0185, "[b]ecause HELCO's renewable energy

⁴⁰ Hu Honua's requested rates to Hawaii Electric Light could result in rates to Hawaii Island customers that are not "just and reasonable" thus indirectly violating HRS § 269-16(a).

⁴¹ Warren Lee, Recording of Hearing, Hearing Day 2, March 1, 2022, at 6:39:39-6:54:25.

generation output is in excess of the statutory forty percent (40%) level, for any new generation project (renewable or fossil) . . . , HELCO must demonstrate that the project provides cost reduction benefits to ratepayers, directly or indirectly, by improving and maximizing the integration of additional lower cost renewable energy.”⁴² It is not disputed that the proposed agreement will initially increase customer rates and bills in early years, but there are disputes whether the proposed agreement will reduce customer rates and bills in later years. A more compelling case would demonstrate savings in every year, but the results of Hawaii Electric Light’s production simulations indicate to the Consumer Advocate that the proposed pricing will not provide cost reduction benefits to ratepayers. Thus, it cannot be determined that the higher short-term costs are offset with the expectation that, in the long-run, customers will see bill decreases or be better off. As a result, justification to exercise the authority granted to the Commission in HRS § 269-6(b) does not appear to be clearly provided. Still, if sufficient evidence regarding the benefits of the project were provided, the Commission might find that the requested preferential rates were reasonable and in the public interest.⁴³ However, due to the remaining concerns and questions regarding the benefits, it is unclear whether the Commission has sufficient evidence to make such a finding.

While Hu Honua has pointed to the provision in HRS § 269-6(b) that the Commission “may determine that short-term costs or direct costs of renewable energy generation that are higher than alternatives relying more heavily on fossil fuels are reasonable, considering the impacts resulting from the use of fossil fuels”, as just

⁴² Decision and Order No. 31759, at 96.

⁴³ This standard is reflected in the Commission’s Decision and Order No. 31759, at 3.

discussed, this should not be deemed to be sufficient. First off, this provision is permissive and leaves to the Commission's good discretion when relatively higher costs for renewable energy are warranted and as noted, the findings support a conclusion that even from a long-term perspective, customers will not be better off. . Second, still within that discretion, the Consumer Advocate respectfully suggests to the Commission that it should not make any determination that relatively higher costs for Hu Honua would be reasonable according to HRS § 269-6(b) because Hu Honua's proposed rates may not even apply to this provision because Hu Honua will likely displace significant levels of other renewable energy over the proposed thirty-year term and so may not fit well into the provision's envisioned foil to "alternatives relying more heavily on fossil fuels". That is, it is not clear to the Consumer Advocate that most current alternatives will "rely[] more heavily on fossil fuels".

In light of the potential for GHG emissions (see Sec. II.B above), the Consumer Advocate contends that the total costs under the A&R PPA, as a function of Hu Honua's request for preferential rates, are not reasonable, and so the Commission should deny the request for preferential rates but without prejudice. If the Commission decides to otherwise consider approving the A&R PPA along with the request for preferential rates, the Commission should only do so with appropriate conditions. The Consumer Advocate's suggested conditions will be summarized later but, as it relates to the request for preferential rates, the Commission could instruct Hawaii Electric Light and Hu Honua to re-negotiate rates and resubmit them to the Commission within ninety days clearly demonstrating that the overall impact on consumers is a net positive (i.e., a

reduction in customer bills over the long-term), which would provide a verifiable benefit to consumers in the forms of lower impact on bills.

E. In the Alternative, If the Commission May Approve the Terms of the A&R PPA and/or Hu Honua's Bona Fide Request for Preferential Rates, Then the Following Conditions, at a Minimum, Should be Imposed.

1. Terms of the A&R PPA.

In light of the A&R PPA's hidden and long-term consequences (see Sec. II.B above), the Consumer Advocate offers that the applicants have not yet carried their burden of proof for approval of the A&R PPA, and so the Commission should adopt conditions for approval to address the remaining concerns and to increase the probability of net benefits to Hawaii Island customers. That is, if the Commission approves the A&R PPA,⁴⁴ it should impose several important conditions on the applicants as follows:

- Requiring Hawaii Electric Light and Hu Honua to submit for Commission approval any A&R PPA amendments, including, but not limited to, a definition of "emergency" when Hu Honua may source feedstock from outside Hawaii Island,
- Requiring the filing of direct benefits from the Hu Honua project, such as the number of jobs and payroll.
- Requiring the filing of reports on community outreach activities to provide timely information on efforts to address remaining community concerns.

⁴⁴ If the Commission did not approve the A&R PPA, then, even if Hu Honua were not eligible for upcoming Phase 3 RFP now, as it protested at the evidentiary hearing, upon denial, the parties to the A&R PPA could agree to terminate the A&R PPA, thus removing such a barrier.

- Requiring Hu Honua to provide verifiable and enforceable details on its proposed reserve account for buying carbon offsets if necessary to fulfill its Carbon Commitment.
- Requiring Hawaii Electric Light to submit a plan, triggered once the proposed Hu Honua facility is in operation for a sufficient amount of time and properly vetted, to remove existing fossil fuel units, such as Puna Steam, Hill 5, and Hill 6 units, from service.

2. Preferential Rates under HRS § 269-27.3.

In the alternative, should the Commission contemplate approving Hu Honua's request for preferential rates, the Consumer Advocate proposes important conditions as follows:

- Requiring the means of verification, such as the filing of reports to address assertions offered as benefit and justification for the preferential rate request, such as: 1) reporting on the total amount of locally sourced feedstock burned in each year, 2) the revenues and benefits associated with the harvesting and use of the feedstock, 3) the forestry management plan - including the total annual amount of replanted trees and jobs associated with the replanting, 4) the assessment whether the operations of Hu Honua is carbon neutral or not, 5) Hu Honua's carbon sequestration plan, and 6) the total number of jobs and payroll generated. Such reporting could be used to cross-check any periodic information offered by Hu Honua in relation to its carbon neutrality commitment and benefits that Hawaii

Electric Light and Hu Honua has offered to the Commission as justification for the project.

- Requiring the filing of a fuel/feedstock report by Hu Honua to evaluate whether there are any cost savings that should be passed to customers.
- As indicated by Hu Honua Witness A at the hearing,⁴⁵ Hu Honua's energy and capacity payments should be at a Commission-approved, lower, non-preferential rate for any energy or capacity produced with feedstock sourced off Hawaii Island.
- Any potential revenues from third-party sales should be used to reduce the preferential rates.

III. CONCLUSION.

The Consumer Advocate contends that the Commission's scope of review and issues in this phase of the proceeding are appropriate to ensure that the result of the Commission's finding is comprehensive, well supported, and not artificially and inappropriately limited to simply looking at whether GHG emissions and the costs associated with those GHG emissions are reasonable. Instead, in order to properly evaluate and support a finding that the proposed A&R PPA is or is not reasonable and in the public interest, the Commission should evaluate all costs associated with the proposed A&R PPA, including, but not limited to, the hidden costs of GHG emissions, environmental, and health impacts as well as the "normal" total costs reviewed by the Commission in any PPA agreement, such as energy, capacity, O&M, and other costs that

⁴⁵ See e.g., Warren Lee, Recording of Hearing, Hearing Day 2, March 2, 2022, at 8:04:52-8:15:15.

will affect customers' bills.

The Consumer Advocate contends that, due to remaining questions and concerns about the A&R PPA and the request for preferential rates in light of GHG emissions that the applicants have not adequately addressed, the Commission will likely be unable to find that the proposed A&R PPA is reasonable. If, however, the Commission may be inclined to approve the A&R PPA, the Consumer Advocate recommends that the Commission should adopt several conditions for approval to address the remaining concerns and to increase the probability of net benefits to Hawaii Island customers and to support a finding that the A&R PPA is reasonable and in the public interest.

DATED: Honolulu, Hawaii, March 29, 2022.

Respectfully submitted,

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DIVISION OF CONSUMER ADVOCACY

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing **DIVISION OF CONSUMER ADVOCACY'S POST-HEARING BRIEF** was duly served upon the following parties electronically to the e-mail addresses below pursuant to HAR § 16-601-21(d), as modified by Order No. 38270, filed on March 14, 2022.

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